

II. INVENTORY OF GREENSPACE RESOURCES

INFORMATION INCLUDED IN THE GREENSPACE INVENTORY MAPS

This chapter is a guide to the inventory maps that were prepared by the Division of Planning staff as a part of the background studies for the Greenspace Plan. The types of natural and cultural resources that were inventoried and mapped as background information for the Plan are listed in Section 1, Chapter IV. The source and date of this information is available from the Planning Division.

INFORMATION NOT INCLUDED IN THE INVENTORY MAPS

It is important to recognize that there were some limitations to the inventory information. Because of the short time frame for the planning process, only resource information already available was collected and evaluated for the Greenspace Plan. The only new study undertaken for the plan was the Rural Survey (Chapter I). In addition, the inventory and mapping covers Fayette County only, including both the Urban Service Area and the Rural Service Area.

Although some types of resources may be considered significant to the greenspace system, up-to-date, thorough, objective inventories of these resources were not available, and the Greenspace Plan could not consider the information. To complete the Urban and Rural Greenspace Plans, it will be important to inventory and fully assess the greenspace potential of the following:

- ▶ *Tree-lined roads.* Although roads lined by mature trees are considered to be very significant to the Bluegrass landscape (see "Views From The Road" survey, Section 2, Chapter I), the inventory maps show major tree stands but do not designate tree-lined roads. This information is available, but it is so detailed that it could not be included in the scope of the mapping.
- ▶ *Plank fences / paddocks / rolling topography.* Although the resource inventory did include properties classified as horse farms, it did not single out those parts of the properties with these signature features of horse farms.
- ▶ *Wetlands:* Wetlands have been identified in current federal legislation as highly significant natural resources that should be protected. However, there has not been a comprehensive survey to identify wetlands in Lexington-Fayette County. The 1988 Comprehensive Plan identifies two wetland sites in the list of Significant Botanical Areas; one of these, Proctor's Bald Cypress Pond, is located within the Urban Service Area and was identified as a significant resource concentration for greenspace planning. The Significant Botanical Areas located in the Rural Service Area were included in the identification of resource concentrations (Section 1, Chapter IV).

The Greenspace Plan, in conjunction with the Comprehensive Plan land use

policies, should provide a structure to coordinate efforts to comply with current and future federal laws concerning wetlands. For instance, the LFUCG Engineering Division's design for flood control projects could affect wetlands. In addition, the Comprehensive Plan should add wetlands to the list and map of environmentally sensitive lands. Wetlands must be defined and identified by delineators certified by the U.S. Army Corps of Engineers. The Lexington-Fayette Urban County Government should make every effort to locate and preserve such ecosystems.

- ▶ *Scenic roads and views.* The Commission reviewed the available scenic information, primarily that contained in the Corridors Enhancement Study, and did not include this in the inventory because it was a study performed by a single staff person. The Commission felt that scenic quality is a subjective matter, and different people have different opinions about it. Although there are methods for inventorying scenic resources based on a consensus of residents' opinions about valued scenes and views, these have not been applied countywide. The "Views From the Road" method (see Section 2, Chapter I) is a model for reliable scenic resource evaluation, but this project only encompassed a small area of the county.
- ▶ *All historic resources.* Historic buildings have only been inventoried fully in some areas of the county and city.
- ▶ *Small-scale and historic features,* such as rock-walled springs and spring houses, bridge abutments, entry gates, barns, etc. Most of these have not been inventoried.
- ▶ *Private properties,* such as estates, churchyards, and office parks, can play an important role in contributing to greenspace for the surrounding neighborhood.
- ▶ *Many government-owned properties* could be preserved or enhanced as urban greenspace, such as utility properties, college campuses, V.A. hospitals, sewage treatment plants, public housing developments, and the outdoor spaces of landmark buildings such as the Courthouse.
- *Drainage facilities.* Existing and proposed locations for major detention basins that are needed to reduce flooding in developed / developing areas, as well as the stream access points that will be needed for water quality and floodplain management to meet future National Pollutant Discharge Elimination System (NPDES) requirements, provide opportunities for greenspace.

These resources should be inventoried, and their current or possible contribution to the greenspace system should be determined. For the private properties, strategies should be identified that can encourage their owners to preserve and maintain them for their greenspace values. For the public properties, joint-use opportunities for greenspace, visual enhancement, and public recreation should be examined and strategies pursued to accomplish this.

Ways to Consider These Resources in Future Greenspace Actions: The Greenspace Plan is likely to be implemented property by property. As sites are evaluated for greenspace protections, either during the development review process or as the property is considered for acquisition or an easement, the cultural and natural resources can be inventoried for that property and its surrounding area. The criteria for determining greenspace priorities (Section 1, Chapter V) list many types of resources that could not be included in the greenspace inventory. These criteria should be used in an evaluation of the need to revise development review ordinances, to ensure that all resources significant to greenspace will be evaluated and considered for protection.

In the long term, it is important to pursue comprehensive assessment of features that are significant for greenspace. For instance, it is difficult to judge what buildings and sites have historic significance without understanding the overall historic context of the county. The historic context study and intensive historic surveys that will be the foundation for the Long Range Historic Preservation Plan should be completed. It is also proposed that community groups and the LFUCG apply the "Views From the Road" method to other areas, to eventually build a complete, countywide scenic inventory. The photographic survey should be repeated for other landscape types such as diversified agriculture, the Kentucky River landscape, and historic rural settlements. The method should be adapted to inventory scenic urban areas also.

INVENTORY MAPS

The inventory information was combined on two sets of maps, one set for the rural service area and another for the urban service area. Essentially the same resource information was mapped for both the rural and urban area. The planning sector maps prepared by the Division of Planning served as the original base for the maps. The urban resources were mapped at a scale of 1 inch = 600 feet. The rural area resources were mapped at a scale of 1 inch = 2000 feet.

Because of the complex layers of information mapped for the rural area, the LFUCG requested preparation of computer-generated maps, which were digitized and printed by the Bluegrass Area Development District (Bluegrass ADD). These maps were digitized using a Macintosh based graphics package, which allows review and printing of the information in separate layers and at different scales. However, this is not a geographic information system (GIS). It is the intent of the LFUCG to convert the rural and urban inventory maps to a GIS format in the future as funds are available.

A GIS system links information, in the form of a computerized data base, with mapped locations. For instance, with a GIS system one could pinpoint a location on the inventory map and use the computer to call up a variety of detailed information about it, such as historic survey information, property ownership, zoning, development history and pending proposals, significant flora and fauna known to be present, etc. A GIS system would greatly aid in the decision-making process for prioritization and implementation of proposed greenspace properties.

The urban and rural greenspace inventory maps are housed at the Office of the

Commissioner of Housing and Community Development and are available for review by the public at that location. These maps were used as the basis for the resource, linkage and site evaluations (Section 2, Chapter III) and for development of the Greenspace Physical Plan (Section 1, Chapter IV). The maps were displayed during many greenspace meetings and public hearings on the Greenspace Plan.

The Division of Planning has more detailed maps of much of the inventory information, which were used as the basis for the greenspace inventory maps prepared by the Bluegrass ADD. For instance, Planning houses a Rural Land Use computer data base, accompanied by maps of the rural area at 1 inch = 400 feet and 1 inch = 2000 feet scale, that offer greater detail on rural land uses and roadways than the Bluegrass ADD maps can provide.

III. PLANNING PROCESS FOR THE GREENSPACE PHYSICAL PLAN

This section of the Greenspace Plan describes the method for starting with the Greenspace Goals and Objectives and the inventory of greenspace resources and developing the Physical Greenspace Plan from them. These planning process notes accompany the Physical Greenspace Plan concepts and maps in Section 1, Chapter IV. This chapter relates the steps in the planning process for arriving at the Physical Plan.

The planning process evaluated three basic components of the greenspace system: **resources, sites, and linkages** (see definitions in Section 1, Chapter IV). The methods and conclusions for evaluating resources, sites and linkages for the urban and rural area were different, reflecting the essential differences between property ownership and use, development potential of vacant and nonurban lands, and the amount and density of remaining Bluegrass resources in the urban and rural area.

Because the great majority of rural lands with significant Bluegrass resources will always remain in private ownership, resource evaluation for greenspace protection was most important for the rural area. Because of the intensity of uses and the fact that there are few remaining Bluegrass resources in the urban area, acquisition and protection of specific greenspace sites and the creation of greenspace system linkages was most significant there.

EVALUATION OF RURAL GREENSPACE RESOURCES, SITES, AND LINKAGES

Identifying Significant Rural Greenspace Resources

Greenspace resources that evoke the Bluegrass identity abound in the rural landscape, and one of the greatest challenges of this plan was to select the rural resources and areas that are most in need of protection. The types of resources that were inventoried, mapped and evaluated for the rural area are listed in Section 1, Chapter IV. Significant locations of natural and cultural rural resources, called "resource concentrations," were identified by **combining two evaluation methods**:

Density of Resources: This method gave equal weight to each category of inventoried resource, and identified locations where three or more resources were in close proximity, regardless of the category of resource or the landscape type. For example, steep slopes, water and tree stands in proximity were identified as a resource concentration. In practice this method gives greater attention to natural resources because the resource inventory mapped a greater number of natural resource factors than cultural resource factors.

Landscape types: This method used the Bluegrass Landscape Types (see Section 1, Chapter II) and perceptions about features that are valued as part of the Bluegrass identity as the basis for evaluating the significance of resources. The resources that are considered to be important to each landscape type were given a weighted value. Those resources that the Commission felt were most characteristic to each landscape type were

given the highest values. These weighted values were added together for resources located in close proximity, and areas of higher overall score were identified as significant resource concentrations.

For example, rock fences were considered by the Greenspace Commission to be one of the most characteristic features of the Horse Farm Landscape. A rock fence alone, or a historic resource in combination with a tree stand, had a high enough score to qualify as significant locations of resources for that landscape type. In effect this method gives greater attention to cultural resources, because features such as rock fences and historic sites tended to be high on the list as significant to all of the various landscape types.

The two evaluation methods were combined in one map to identify significant rural resource concentrations. Combining the two methods balanced any preferences towards cultural or natural factors in each method and gave equal consideration to both.

The limitations to this method should be recognized. Chiefly, there are resources considered significant to the landscape types that could not be included in the inventory of current information or in the analysis. These include, for instance, scenic views, tree-lined roads, and qualities of streams such as deep pools, waterfalls, or palisades (not inventoried) and springs (not distinguished from other geologic hazard areas in the inventory). As the Greenspace Plan is implemented, the map of significant rural resource concentrations can be refined when scenic studies are done or specific properties are evaluated for easements and acquisition.

Identifying Rural Greenspace Sites / Public Access Needs

This evaluation was based on the concept that the public needs additional access opportunities to enjoy the special qualities of the rural area. The location, size, landscape qualities, and use of existing public and semi-public properties were considered. **General geographic areas needing new major public access opportunities** were identified in several steps:

- First, **geographic areas that are the best examples of the Bluegrass identity yet do not have public access** were identified. In general, these are the **northeast area (North Elkhorn vicinity, Russell Cave to Bryan Station), Boone Creek area, Kentucky River palisades area, and the southwest area (South Elkhorn vicinity).**
- **Existing park properties were evaluated** by level of use and the quality of the resources they contain, with a goal that high quality examples of all Bluegrass landscape types should be accessible for public enjoyment. For example, Masterson Station Park is in a strategic location, but does not contain much in the way of significant rural resources. Raven's Run Nature Sanctuary is within a significant area and represents the Kentucky River valley landscape. However, Raven's Run is heavily used, and it has only a very small area of river palisades. This added the **need for increased public access to the western area (Old Frankfort Pike vicinity) and the palisades area.**

- More specific areas that should be the **focus of increased public access** were selected by outlining the **rural resource concentrations of the highest value** that are located within the geographic areas and landscape types identified above.

Identifying Potential Rural Linkages and Corridors

Potential linkages and corridors considered for the rural physical greenspace plan included the following:

- Locations at the urban edge that had been identified as **urban-to-rural connections**, such as potential safe crossing points under or over I-75. These would be potential connections between the major greenspace system corridors within the urban area and those in the rural area.
- Bluegrass Wheelman **bicycle routes**. These are routes that are identified by the main bicycling club of the Bluegrass region as being the most attractive rural bicycling routes.
- **Roads located within and near significant rural resource concentrations**, as identified in the first step of the rural plan, the resource analysis (above).
- **Off-road linkages** were considered only where they traverse public or semi-public property, or where agricultural activities could be buffered from recreational activities in the corridor. These included: **abandoned railroad rights-of-way** with rails-to-trails potential and **greenways** along creeks extending from the urban area.

EVALUATION OF URBAN GREENSPACE RESOURCES, SITES, & LINKAGES

Identifying Significant Urban Greenspace Resources

The Greenspace Plan identified those urban natural and cultural resources, as listed in the Inventory (Section 1, Chapter IV), that should be enhanced in developed areas, retained in developing areas, and made accessible through the greenspace system. Because of the intensity of development in the urban area, remaining Bluegrass resources are few and scattered widely. All resources were carefully located on the urban sector maps. Locations where two or more resources occur in close proximity, such as a stream and steep slope, or a historic building and wooded area, were identified as having greenspace potential.

Identifying Urban Greenspace Sites / Public Access Needs

Opportunities for urban greenspace sites were initially identified on a 1" = 2,000' scale map showing all properties within the Urban Service Area (USA) of 10 acres or more in size that have not been developed to their urban potential. These properties, which are called "nonurban" properties for the purposes of this report, include vacant lands, horse farms, estates, and uses such as plant nurseries. All nonurban properties with resource

concentrations, as designated on each urban sector map, or that are located within or adjacent to the linkage system shown on the Greenspace Physical Plan (Chapter V), were identified as having potential as greenspace sites. Altogether, 66 sites were identified. Through a series of map overlays, the following characteristics were catalogued for each potential greenspace site:

- The presence of a **resource concentration**.
- Whether it is near the location of a **proposed park**, as shown on the 1988 Comprehensive Plan Land Use Map.
- Whether it is in an area with an identified **park need**. The analysis of park need showed all residential areas that are not within a 1/2 mile radius service area of an existing park. (The 1/2 mile radius represents walking distance to a park.) The park service areas were not extended across edges to neighborhoods, such as railroads or major streets, in recognition that these can be barriers to safe access to parks by foot or bicycle.
- Whether it is a **greenway** as shown on the 1988 Comprehensive Plan, or a **priority greenway** as identified by the Division of Planning staff – those with substantial remaining natural value and potential for recreational trails.
- Whether it is within or adjacent to the proposed Greenspace **trail system**, as shown on the Urban Greenspace Physical Plan.

Although it was not possible to visit all 66 potential sites in the field to verify this information, 18 sites distributed throughout the city were drawn on maps of 1" = 600' scale and were field-checked. The list of sites with greenspace potential is in Appendix C. It should be noted that, as additional inventory information is available about greenspace resources and opportunities, sites may be added to this list. The list of sites identified as having potential for public access as a part of the greenspace system will be further evaluated by the prioritization process recommended in Section 1, Chapter V. At that time, decisions will be made as to which sites should be investigated for acquisition or other protection measures.

Next Steps: The evaluation of urban sites with greenspace potential was subject to the same limitations as the resource inventory, as discussed in Section 2, Chapter II – namely, that some types of resources and opportunities had not been inventoried, and this information was not available. To complete the Urban Greenspace Plan, it will be important to fully assess the greenspace potential of three other types of properties with greenspace potential: private properties, government-owned properties; and existing and proposed locations for major detention basins.

Identifying Potential Urban Linkages and Corridors

A key part of the greenspace urban concept is to create a network of corridors, trails, and open spaces throughout the city, for purposes of **visual, recreational/commuting, and**

environmental linkage. There were three steps to drawing the urban linkage system, shown on overlays. The first step was to answer the question, **what would the system link?** Like a street system, the greenspace system was envisioned as tying together major open spaces and all of the activities and destinations of daily life – parks, schools, libraries, commercial and entertainment areas, employment areas, and residential neighborhoods. An overlay was drawn, based on the 1988 Comprehensive Plan, with **open spaces and urban activity centers and attractions** located on it.

The second step was to identify **greenspace "districts."** Just as with planning for streets, it was helpful to divide the City into districts, or neighborhoods, for greenspace sites and linkages, especially for non-auto travel within a neighborhood and between neighborhoods.

- **Edges:** The edges to these districts are features that can only be safely crossed at certain points. Edges include:
 - ▶ *Limited access roads, elevated roads, and railroads*
 - ▶ *Areas of incompatible land uses – e.g. heavy industrial uses, such as along Town Branch from Versailles Road to Leestown, and along Palumbo*
 - ▶ *Roads with a high traffic volume, such as Broadway and Tates Creek, that are difficult for recreational users and young cyclists to cross*
- **Safe crossing points:** To create an interconnected greenspace system, especially for bicycle and pedestrian travel, locations were identified where edges can be safely bridged by the greenspace system, such as:
 - ▶ *Bridges, underpasses, farm tunnels, and drainage culverts* with existing sidewalks or sufficient height and width for pedestrian/bicycle paths.
 - ▶ Opportunities at *railroads* for creating parallel paths along the railroad edge and for crossing over/under limited access roads such as New Circle and I-75. Because of the safety concerns attending use of lands adjacent to railroads for trails, this was not pursued. However, if any railroads are abandoned in the future, the right-of-way should be immediately secured for greenspace.
- **Cross-town routes between districts:** Cross-town travel (concentric circles within New Circle Road), which is significant for the greenspace system, is not well-developed in the street pattern. However, drainage patterns provide opportunities for cross-town routes perpendicular to the "spokes" of the major street system. To help break the habit of looking at the city as the existing street pattern, the watershed boundaries and major drainages of North and South Elkhorn Creeks and East and West Hickman Creeks were reviewed for greenspace linkage potential.

The third step was to **map and review all linear features** that were listed in the inventory as having greenspace potential, to identify those that could create connections between urban activity centers and attractions and major open spaces, both within and between

neighborhoods. The list of opportunities for linkages that were considered included:

Off-Street Linkage Opportunities:

- *Greenways* – The Division of Planning staff selected those greenways, as shown on the Comprehensive Plan Land Use Map, with substantial remaining natural qualities, that is, unchannelized streams and minor drainages with trees. Greenways included in the greenspace system were those that appear to have potential for recreational trails.
- *Abandoned railroad rights-of-way* and rail lines now in use that may be abandoned in the future. (No rail line currently in use was included as a part of the greenspace system.)
- *Abandoned rural road rights-of-way and remnants of rural roads* that will no longer be used by automobiles. Rural road remnants are those narrow roads bypassed by widening or realignment that still have rural character, such as Squires Road.
- *Major parks and public / semi-public open spaces* that could have trails through them.

On-Street Linkage Opportunities:

- *Arterial roads and interstates* that have potential for corridor enhancement and those with Corridor Plans prepared by the Corridors Committee.
- *On-street bikeways*, existing and proposed. There are three types of on-street bikeways in the Bicycle Facilities Plan:
 - ▶ Road widened for separate bike lane, striped and signed
 - ▶ Separate bike lane within existing road width, striped and signed
 - ▶ No separate bike lane, signed only
- *Roads* designated in the Transportation Plan for *extension, realignment, widening or new construction* that have potential for bikeways, corridor improvements, landscaping, and preservation of parallel streams for a parkway effect.
- *Remnants of rural roads* that would remain in use by automobiles.

Field Checking

Linkage opportunities were field verified in much of the urban area by staff and Plan Subcommittee members. Field visits were helpful for: identifying sites smaller than 10 acres, the minimum size shown on the nonurban / vacant properties map; finding areas of natural vegetation along streams; and finding safe crossings for major roads and railroads. For instance, the entire stretch of the proposed South Elkhorn-Higbee Mill-

Squires Road-Hickman Creek corridor, as shown on the Physical Plan, was field-checked. Field visits found that there is a drainage culvert large enough to traverse under the Southern Railroad tracks and serve as a potential link between Fayette Mall, Shillito Park and the Reynolds Tobacco Plant property. Field work also located a farm tunnel beneath Nicholasville Road just south of Waveland State Park .

Field checking was sufficient to demonstrate that the design concepts for the physical greenspace system are feasible. However, the Physical Plan in most areas is not property-specific. As the greenspace system is fleshed out for each area, further field work will be needed to identify the properties with the best greenspace potential.